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ABSTRACT

The concept of functional literacy might be considered to have its ceremonial initiation at the World Conference of Ministers of Education on the Eradication of Illiteracy in Tehran, Iran, in 1965. At that conference important implications emerged for program development, methodology of teaching, and program content. An effort is made in this paper to work out more specifically these implications. The author states that literacy projects should be planned basically as part of the educational effort on one hand and as part of the economical planning for the country on the other hand. The comprehensive nature of the program should include economic, social, and political development. The program should also be linked with the literate environment of the community and should be formally evaluated. Lack of proper selection of priorities causes the project to lose its focus and effectiveness. Today functional literacy projects face such problems as (1) reflecting clearly both educational and economic concerns, (2) coordinating relations between project staff and field staff, (3) finding effective administrative methods, and (4) promoting the concept so that highly professional commitments at all levels could be obtained. (AW)

OCCASIONAL PAPERS IN READING
INDIANA UNIVERSITY SCHOOL OF EDUCATION

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THE CONCEPT AND THE PROGRAM

Dr. H. S. Bhola
Indiana University

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U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Editor's Note

Functional literacy concerns us all these days and is not a problem singular to emerging nations. But countries with large illiterate populations may offer us guidelines in dealing with teaching those who do not read. Dr. Bhola has been active in U.N.E.S.C.O. efforts for world wide literacy and has conducted experiments in teaching adult illiterates. In this paper he suggests a way to visualize the development of a literacy training program.

W. B.
J. L.
C. B. S.

FUNCTIONAL LITERACY — THE CONCEPT AND THE PROGRAM[1]

By Dr. H. S. Bhola[2]
Indiana University

There is no doubt that functional literacy is today an influential concept. The spell of the idea is both strong and widespread. Adult educators, development economists, rural reconstruction workers, innovation diffusion agents, planners and executives in international agencies all seem committed to functional literacy: the idea that literacy can be made to play a generative role in the economic and social development of communities. While functional literacy workers, especially those working in Unesco-sponsored projects, call their programmes experimental, in actual fact they are already sold on the concept of functional literacy and the hypothesis has come to have the status of a finding. Some other literacy workers feel so embarrassed about simple literacy as compared to functional literacy that they have promoted their past work from simple literacy to functional literacy!

Again, while the good old literacy worker was often poor the functional literacy worker is much better off. There is some money behind functional literacy and that contributes to the concept being influential, as it presently is. Sizeable funding has been available internationally. By the end of the last year Unesco had sponsored functional literacy projects in ten countries, with 34 more requesting future functional literacy projects. The United Nations Development Programme through Unesco had so far contributed

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1 This paper was presented to the Thirteenth Annual Study Conference 1969, organized by the University of East Africa, University College, Institute of Adult Studies, Nairobi during August 17-28, 1969 on the theme of "Adult Education and Rural Development."

2 Dr. H. S. Bhola is presently Literacy and Adult Education Trainer. UNESCO/UNDP Work-Oriented Adult Literacy Pilot Project, Lake Regions, Tanzania. This paper is an individual contribution from the author and does not commit either Unesco or the Government of Tanzania in any way whatsoever.

8.5 million US dollars with total costs of these projects reaching some 40 million dollars.[3]

The rise of the concept of functional literacy has been impressive but its fall may be disastrous for the literacy movement in the whole underdeveloped world. The concept has taken decades to emerge from the frustrations and failures of literacy workers the world over who found that too often the adults for whom they dreamed those beautiful dreams of enriched and enlightened lives did not want any part of the dream: they did not, voluntarily, want to read and write; did not want to avail of the human right to literacy; and when, sometimes, some of them had learnt to read and write they did not know what to do with their newly acquired linguistic skills. The new concept of functional literacy promises to solve the old and difficult problem of learner motivations and at the same time relates literacy to the economic, social and political aspirations of developing nations. But the failure of what is today an influential concept may completely discredit literacy workers, disprove the very need for literacy, and may put this human right in abeyance until more important things have been done!

To give the concept of functional literacy a chance the concept itself must be understood and translated into actions and operations. The implications of the concept for the various aspects of programming and implementation should be logically deduced and reflected in the work undertaken. We should not be testing different and diluted concoctions and discrediting the initial concept--which, I am afraid, we seem to be doing right now. In the following we analyse the concept of functional literacy to clarify its implications for planning, programming, administration, training and evaluation for functional literacy programmes. We would try to articulate the difficul-

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[3] Document 15C/52 dated 12 September, 1968; Unesco, Paris; Page 1.

ties that have already become apparent in executing these programmes, or soon will be experienced in converting the concept of functional literacy into active programmes of work.

Functional Literacy—The Antecedents

Understandings of both theories and events are often improved by a study of their antecedents. Such a study places ideas in perspective and lights up their shapes and contours. It is not intended in this paper to provide a complete documentation of the historical and conceptual background of the concept of functional literacy. However, some of the antecedents of the concept must be analysed to better understand the concept itself. We, therefore, discuss briefly the following (a) ideological, (b) cultural, (c) economic, (d) linguistic, and (e) motivational background of the concept of functional literacy. The effort should not be viewed as an exercise in compartmentalization of the concept. On the contrary it should be seen as an analysis of a concept that is comprehensive in nature and which through such an analysis may be better understood.

Ideological Background: Literacy has been taught to claim the brute for God to enable him to read the Word for better life after death. It has also been taught to claim the masses to a political ideology: to enable workers and peasants to understand their interests and resist exploitation by the exploiting classes. More recently in our lives we have seen it emerge as a social good—a human right. The concept of functional literacy now advanced has not discarded the ideological; it has built on it. To the ideological has been added the utilitarian.

Cultural Anthropological Background: Cultural anthropological research and theory now available, especially in the area of 'culture and personality',

also provides theoretical underpinnings to the concept of functional literacy. Literacy is seen as unlocking of human potential—cultural, social, economic. Man has been known to be the only symbol--using creature in this universe. Humanity indeed consists in the human ability to make 'symbolic transformation'[4] whereby man is released from a purely physical--definitional existance, from the perennial present tense of animal life and can have a past, a future, a 'self' and an 'other'. Between two human beings, other things being equal, a literate man is better able to handle information (in the Information Theory meanings) and cope with environment — social, political, and economic— than a man who is illiterate. The illiterate is, of course, also using symbols but the literate is using symbols at two levels— oral and written. The literate is a more efficient symbol—user. His information handling capacity is thereby increased so also his capacity to act meaningfully on the environment around him. This generalization is also applicable to communities. Their change-proneness can be shown to be related to such factors as levels of general education in the community; availability of information storage and retrieval facilities in the community; and extent of use of such facilities.

Economic Theory Background: Economic theory antecedents of functional literacy can in fact be deduced from the cultural anthropological antecedents of the concept but were independently formulated by economists first on the basis of ex post facto analyses of economic systems that had shown fast economic growth. "These studies indicate that the major part of the growth

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4 Susan K. Langer, Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art; New York: Harvard University Press, 1955. Also Roger Brown. Words and things, New York: Free Press, 1958. At least one vocational and literacy training Project has proved the usefulness of literacy in understanding abstractions and exact concepts. See C. Maguerez. La Promotion Technique du Travailleur Analphabete; Paris: Eyrolles (61 Bd. St. Germain, Paris, 5); 1966.

in production in developed countries over the last half century cannot be accounted for by the inputs of physical capital, man hours and natural resources. The major part must be ascribed to technical progress and human resources among which education plays a prominent role."[5] The unlocking effect of literacy on productive human potential was documented later in other studies that analysed more well-defined economic systems and used quasi-experimental empirical techniques. One of these studies, for example; found that:

> "...the rudimentary instruction gained in one year of primary education increases a worker's productivity on the average by 30 per cent, whereas the improvements in the qualifications of illiterate workers and the increase in their output, resulting from a similar period of apprenticeship at a factory, is only 12 to 16 per cent a year. The improvement in qualification resulting from one year's education at school is, on the average, 2.6 times greater than that resulting from one year's apprenticeship."[6]

The preceding quotation from Stanislav Strumilin is itself based on Gosplan data correlating expenditures on school education and economic returns thereof and is probably the most heartening statement for a functional literacy worker. It may be said here in fairness that the concept of functional literacy owes more to development economists than to educators. The leadership came from the former—even the money came from them.

Linguistic Background: The idea that economic skills and reading should be taught together so that reading is both meaningful and useful to the learners from the very beginning is an important part of the functional literacy

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5 H. M. Phillips, "Education and Development," Economic and Social Aspects of Educational Planning: Unesco; Paris: 1964; Pages 54-55. See also T.W. Schultz, "Education and Economic Growth," Sixtieth Yearbook of the National Society for the Study of Education (Part II): Chicago: University of Chicago Press, 1961.

6 Stanislav Strumilin, "The Economics of Education in the U.S.S.R.," Economic and Social Aspects of Educational Planning, op. cit., Page 71.

concept. But this would not even have been conceived if methodological insights provided by linguists had not been available in the form of the so-called global method of language teaching. Now the teacher on the very first day of class could write on the blackboard: Pamba ni mali (Cotton is wealth) or Madini ni utajiri wa taifa (Mines are a nation's wealth). He could thus rightaway draw upon the motivational springs of cotton farmers or miners he was teaching and at the same time use in a linguistically supportable approach to language teaching.

Motivational Theory Background: Lastly, there is hidden in the concept of functional literacy the psychological motivational theory. Adults want reinforcements and rewards for learning behaviour. Reading must be satisfying as an act and again, what is read must be both meaningful and useful in the life of the adult. Again, there is involved here as a corollary a 'theory of comparative deprivations'. Human beings like to fulfil some human needs before satisfying some others. Which human need will be fulfilled before another depends upon the physical or psychological valence of each different need for a particular person or group at a particular time. In developing countries, it is theorized, economic deprivations would be the most acutely felt and hence the fulfillment there of through learning improved economic skills will be motivational for learners. Teaching of economic skills could thus gild the literacy pill.

With this brief analysis of the antecedents of the concept of functional literacy we can now go to the concept itself.

The Concept of Functional Literacy

While it is difficult to give exact dates for births of concepts and ideas, the concept of functional literacy may be considered to have its ceremonial initiation at the World Conference of Ministers of Education on

the Eradication of Illiteracy[7] in Tehran, Iran, during 9-18 September, 1965.

A later Unesco document summarises the concept rather concisely:

> "Briefly stated, the essential elements of the new approach to literacy are the following: (a) literacy programmes should be incorporated into and correlated with economic and social development plans; (b) the eradication of illiteracy should start within the categories of population which are highly motivated and which need literacy for their own and country's benefit; (c) literacy programmes should preferably be linked with economic priorities and carried out in areas undergoing rapid economic expansion; (d) literacy programmes must impart not only reading and writing, but also professional and technical knowledge, thereby leading to a fuller participation of adults in economic and civic life; (e) literacy must be an integral part of the over-all education plan and educational system of each country; (f) the financial needs of functional literacy should be met out of various resources, public and private, as well as provided for in economic investments; (g) the literacy programmes of this new kind should aid in achieving main economic objectives, i.e. the increase in labour productivity, food production, industrialization, social and professional mobility, creation of new manpower, diversification of the economy."[8]

The preceding quotation has some important implications for the organizers of functional literacy programmes. There are implications for over-all planning: that the functional literacy plans must on the one hand be integrated with educational plans and on the other with plans for economic and social development. There are implications for programme development, particularly in regard to the selectivity principle: the selectivity principle should be applied to the selection of a region or regions chosen for work; it should be applied while assigning priorities to economic sector or sectors, and the selectivity principle should again be applied to learner selections to ensure homogeneity of learner groups in terms of their economic or occupational interests. There are implications in the quotation for methodo

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7 Final Report of the World Conference of Ministers of Education on the Eradication of Illiteracy (Tehran, September 8-19, 1965): Unesco, Paris: (ED/217), 1965.

8 An Asian Model of Educational Development: (Perspectives for 1965-80): Unesco, Paris, 1966, Page 97.

logy of teaching, raising questions of integration, since literacy must be taught together with Professional and technical knowledge. And there are implications for the programme content: while economic factors should be emphasized, social development and social participation should not be excluded. The comprehensive nature of the programme is implied also in the coordinated public and private efforts that are recommended.

In the following we will work out more specifically the implications of the concept as it has emerged. Unfortunately, functional literacy has not attracted the attention of university communities[9] so that some of the theoretical, conceptual, and developmental help that could have been available to planners and implementers of specific programmes has not been forthcoming. This I see as the most serious lacuna in the area. There is precious little that could help the literacy workers in operationalizing the concept into day to day plans or enable them to invent solutions to their specific problems. This is unfortunate because the demands of the new concept are highly professional demands; commonsense and traditional experience are simply not enough.

This brief paper cannot in one big, brave stroke provide what has not come from the universities nor yet generated within the functional literacy projects. We can only give brief indications of the professional issues and problems that would be part of functional literacy work and which, if not faced and tackled, would vitiate our efforts and discredit our work.

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[9] The only university group that I have seen engaged in literacy research and theory was Project Literacy of Cornell University, Ithaca, New York. However, the questions they discussed were more or less culture-bound. These seem remote to the problems of literacy work in our parts of the world. See Project Literacy Reports No. 1 to 9 now collected in H. Levin, and Joanna P. Williams (ends.) Basic Studies on Reading: New York: Harper-row, 1969.

Planning a Functional Literacy Project

The basic requirement here consists in the planning of a functional literacy project on the one hand as part of the educational effort and on the other as part of economic planning for the country. It should indeed be understood that a functional literacy project is not just a literacy project or what is called sometimes a work-oriented literacy project but is essentially socio-economic change project. It must therefore be conceived from that perspective. Economic improvement is chosen as the thin-end-of-the-wedge in this change effort. Economic change is thus both the means and the end. The concept, also requires that the economic sector selected for work should be a priority sector; it should be in the midst of rapid change; and it should, when developed, make a difference to the country. There also is the implication that production and distribution method in the chosen economic sector are in the process of modernization so that literacy would acquire a function in the newly modernized economic system. If this is not so starting a functional literacy programme in that economic sector would be useless if not absurd.

Yet serious mistakes are made by functional literacy workers right at the planning stage. This basic pre-requisite of the concept is violated while these projects are supposed to be testing the functional literacy concept. In India, for example, one of the functional literacy projects has selected an area for work that fulfills these requirements and is a high priority economic investment area under a Government of India programme called the High-Yielding Varieties Programme. Functional Literacy work with wheat farmers in that area is well integrated with the government plans and governmental economic priorities and is in the mainstream of India's green revolution. This project, we hear, is succeeding. But another project,

again in India, worked with young farmers drawn from all over the place with no focus on one economic sector and with only a diffused and far-fetched relationship with regional needs and governmental plans, naturally fell on bad days and was saved from attrition only through monthly subsidies that were paid to the farmers for attending. They looked at their training as salaried work.

Lack of proper attention to selection of priorities makes a functional literacy project lose focus and effectiveness. This happens more often in agricultural projects than those in the industrial sector. Being unable to make up their mind about the most generative economic activity and the most important crop or produce that would make a difference to <u>both</u> the individual farmer and the nation the organizers go on to cover all farmers and sometimes also fishermen, herdsmen and village carpenters. A project that has no sharp focus and thinks in terms of all the crops or all the occupations obviously had not had the benefit of hard-nosed economic decisions on economic priorities. They are not using the <u>selectivity</u> principle.

Again, plans are sometimes superimposed on mere geographical units or administrative regions without a deliberate <u>system analysis</u> of the area in terms of economic interdependence of communities, existing physical and social communication networks, commonness in the use of cooperative marketing facilities, etc.

Administrative and Crganizational Problems

Since functional literacy projects are both economic and educational, how can we include in their administration both the economic and the educational interests so that in programme planning and decision-making both kinds of concerns are reflected? This is the crucial question. Problems involved are many. Educators and agriculturists have not learnt to work

together. (Though teams of educators and industrial workers where technicians have important leadership roles seem to have done much better.) How will decisions be made cooperatively? Who will lead when? It so happens that if a project is located in one Ministry or Department, whatever it is, the others just withdraw. And in fact the responsible ministry or department does not mind it too much for it can then take all the credit. Where functional literacy projects are internationally funded there are also the loaves and fishes of office—all these interesting visits abroad, all expenses paid.

There are problems of organizational relations between project staff and field staff and these become really acute when work has to be done through existing extension channels. Workers in the field look at the 'project work' as an additional unwelcome chore. (Industrial sector functional literacy projects, here again, avoid lots of problems but not the agricultural sector projects). In international projects problems also arise of intercultural communication.

Old administrative methods and procedures and patterns are just not good enough for functional literacy projects. Nor can effective procedures be found entirely through trial and error. Bold and imaginative experimentation in administrative design and organization building are needed. We need here the help of professional behavioural scientists who can help in the design of professional organizations. This is already a very active area and lots of insights in the field of organization development are available.[10]

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[10] Some useful references are Herbert A. Simon, Administrative Behaviour, New York: Free Press of Glencoe, 1957. John M. Pfiffner, Administrative Organization: Prentice-Hall, 1960. Behavioral Sciences and Educational Administration (Sixty-Third Yearbook of the National Society for the Study of Education): Chicago; The University of Chicago Press, 1964.

Resource Commitments and Personnel

The functional literacy concept is not a new mass produced and cheap substitute for the old traditional literacy. It is, let me repeat here again, highly professional and technical work. It therefore demands huge resource commitments. Many professional workers are needed. Diversified teaching aids are needed. Workshops, tools, and implements are needed. Teachers and supervisors are needed. Most of all, is needed a psychological revolution in the minds of authorities that functional literacy cannot live on crumbs.

Personnel building is another problem of functional literacy projects. In old traditional projects we most often went to the education departments and got the teachers we needed. Or we went to social work and got all the bleeding hearts necessary. In a functional literacy project we need socio-logists, system analysts, economists, agriculturists or industrial engineers, curriculum specialists and trainers, editors, audio-visual specialists, broadcasters and media men, field workers, researchers. We cannot do with less.

One of the most crucial personnel problems arises at the other end—in the field. Who will be teaching functional literacy classes and who will be supervising them? In an industrial setting, again, logistics are in the favour of the programme organizers. There are foremen who can be trained as literacy workers and classes can be fitted into an already existing training-supervision complex. Short distances favour supervision effectiveness.

In an agricultural context things are different. Industries are modern sectors and use modern 'foreman to labour' ratios. In agriculture 'extension worker to clients' ratios are impossibly low! There may sometimes be not more than ten agriculture extension workers in an area of 1,000

square miles. It is not possible thus to use them as functional literacy teachers though that is what should be done. Team teaching has to be resorted to but this also breaks down unless day to day supervision is effective. Also teams do not just happen. Team members must learn to relate with each other and they must know what is expected of them individually and what cooperatively. Teams are hard to create and maintain.

Designing a Functional Literacy Programme

Concepts and plans must be translated into programmes: things that people at various levels must do in their day to day work. It seems to me that functional literacy workers cannot escape their past. Left to themselves they quickly regress into <u>traditional</u> <u>literacy</u> work. The comprehensive nature of the programme which includes economic, social and political development is forgotten. The focus becomes exclusive: literacy is taught, work is forgotten.

In the teaching of the economic activity when it is taught there is often vertical slicing. It is forgotten that a wheat farmer is not simply a wheat farmer. He may have a vegetable garden, two or three cows and some chickens. He ma' also be selling his wheat through the cooperative and may be carrying a loan from a credit society. Thus while wheat farming should remain the core of a functional literacy programme developed for wheat farmers, some teaching must take place in animal husbandry, cooperatives and marketing. In fact some of these activities may be interdependent and must be so seen and so taught.

There is one further limitation that comes in. In the teaching of economic skills <u>manual</u> skills are often forgotten since they are hard to organize and organizers feel satisfied with the teaching of <u>verbal</u> knowledge included in their primers and followup books. We thus find a series of

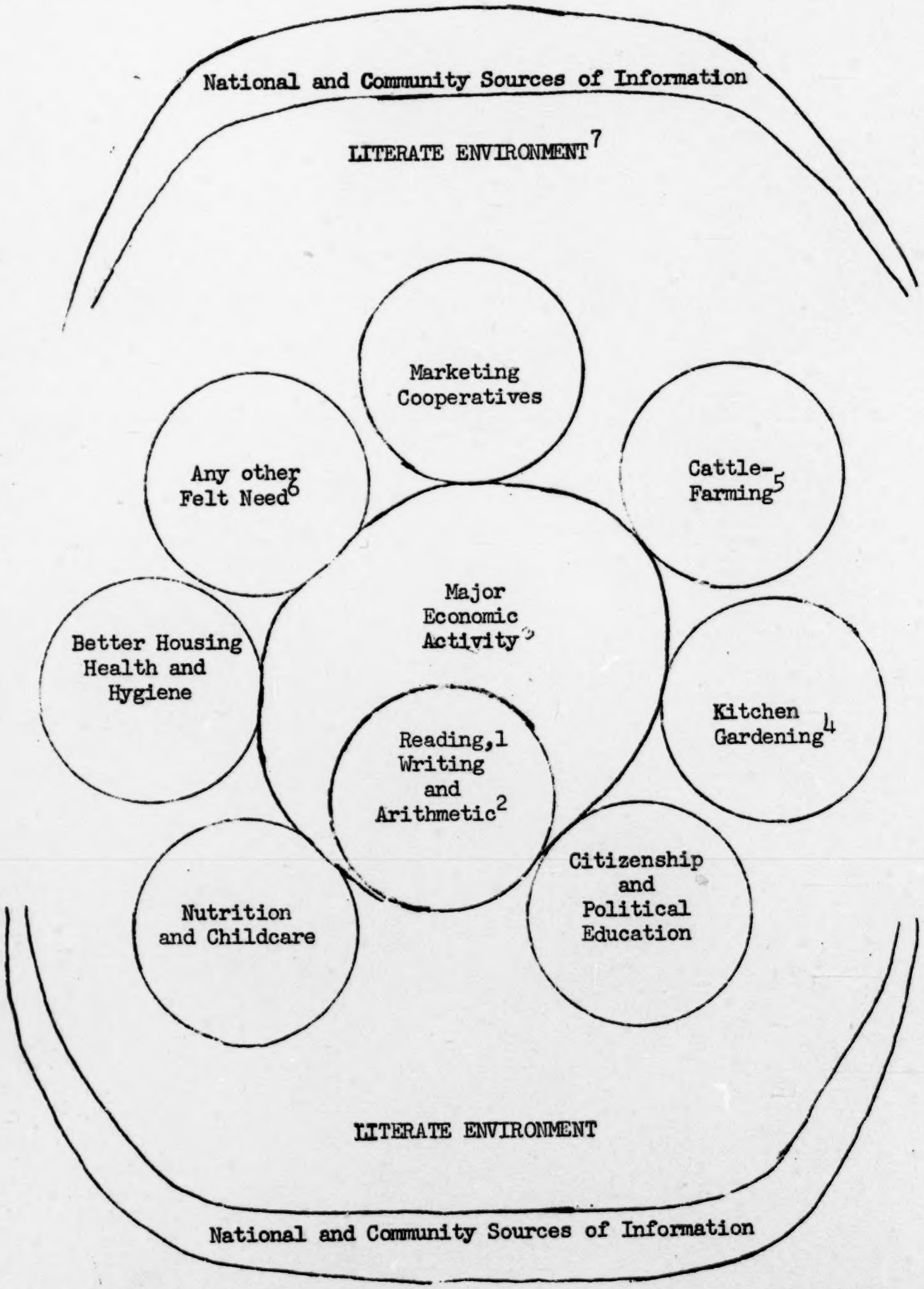

Fig. A Graphic Presentation of the Contents of a Functional Literacy Programme

conscious and unconscious surrenders of programme content that makes a joke of the concept of functional literacy.

The figure given below presents graphically the contents of an ideal-type functional literacy programme in the agricultural sector. The economic activity still forms the core but other related activities are not forgotten.

Some further explanations of the figure are in order. The numbers of paragraphs, in the following explanations, correspond to numbers in the figure.

Explanations

1. The ability to read must be built up to a level where the probability of relapse into illiteracy is minimized. Seventh grade reading ability is recommended.

2. Arithmetic should not be neglected in a functional literacy programme. On the other hand, numerals should be given a pride of place without which it is impossible to use either scientific methods of production or to enter the modern sector of cash economy.

3. The economic activity should be selected on the basis of detailed system analysis of a community chosen for field work. The economic activity should be selected for its likely generative properties in bringing about economic, social, and cultural change.

4,5. Once a major economic activity has been chosen it doesn't mean that all other minor but related economic activities like kitchen gardening or cattle keeping for family use should be banned. In fact subsidiary economic activities like kitchen gardening and cattle keeping should be built into the programme—though not necessarily into the primer. One major problem of development in Africa has been the divorce between farming and cattle raising. It would be tragic to teach farmers rice-growing, or cotton-

growing without reference to cattle husbandry. However, it should be noted that the content shown in the outer circles around the core (teaching of literacy integrated with teaching of information about economic activity) is not visualized to be taught through primers and other written materials. These complementary activities will be taught, almost always, through demonstrations and easy-to-use visual materials such as flannelgraph stories, pictorial flashcards and sets of posters.

6. It should be clear that the content of circles around the core will be selected in accordance with local needs. The various content areas shown in the above diagram are by way of example only and are not prescribed for all projects.

7. The whole programme must be linked with the literate environment in the community and the nation. Where no literate environment exists in a community it must be created by projects by establishing rural newspapers, opening village libraries, sponsoring reading and discussion groups, and establishing community centres for radio listening. Such work must be undertaken alongwith the opening of literacy classes.

This means that we look at cultures or sub-cultures as integrated wholes and we do not seek to change just one feature but many interdependent features of a culture at the same time.

The Methods and Materials of Functional Literacy

I do not think that there is any one method of functional literacy. The methodology of functional literacy is indeed the methodology of curriculum construction which must be used to invent methods and techniques depending upon the social and cultural milieu of client groups, programme content, learner characteristics, manpower resources, and available educational technology. Depending upon the context of work methodological options disappear

or become available.

There are, however, some methodological constrains that are inherent in the concept of functional literacy. For example, an important aspect of the concept is the meditation of the motivational theory between the linguistic and the economic. The teaching of economic skills and of reading and writing must therefore be integrated—as visibly for the learners as for the workers. This integration is crucial. The motivational support to literacy consists in this.

Integration simply defined is the combination of parts to make one organic whole but integration is not always easy to achieve in education curriculum construction. In fact total integration of all instructional activities is quite impossible. Part of the integration, therefore, may be <u>organic</u> but the other part may be only <u>additive</u> in nature.

It is important, however, for functional literacy workers to achieve organic integration in the primer where language should be taught with the stuff of occupational interests and skills. This we already know is possible. Learners can begin to learn reading and writing with words and sentences directly related to economic skills. But integration is involved in various other sectors and levels. Reading and verbal knowledge of occupation once integrated in the primer must in turn be integrated with learning of manual skills. New attitudinal learning must be integrated with the total effort. Last of all learning of economic skills must be integrated with social and cultural advancement. As I have indicated earlier all this integration cannot be organic; some of it must be additive and interpenetrated in terms of time.

The figure given on the following page gives an idea of how the various streams of learning in a functional literacy programme in the agricultural

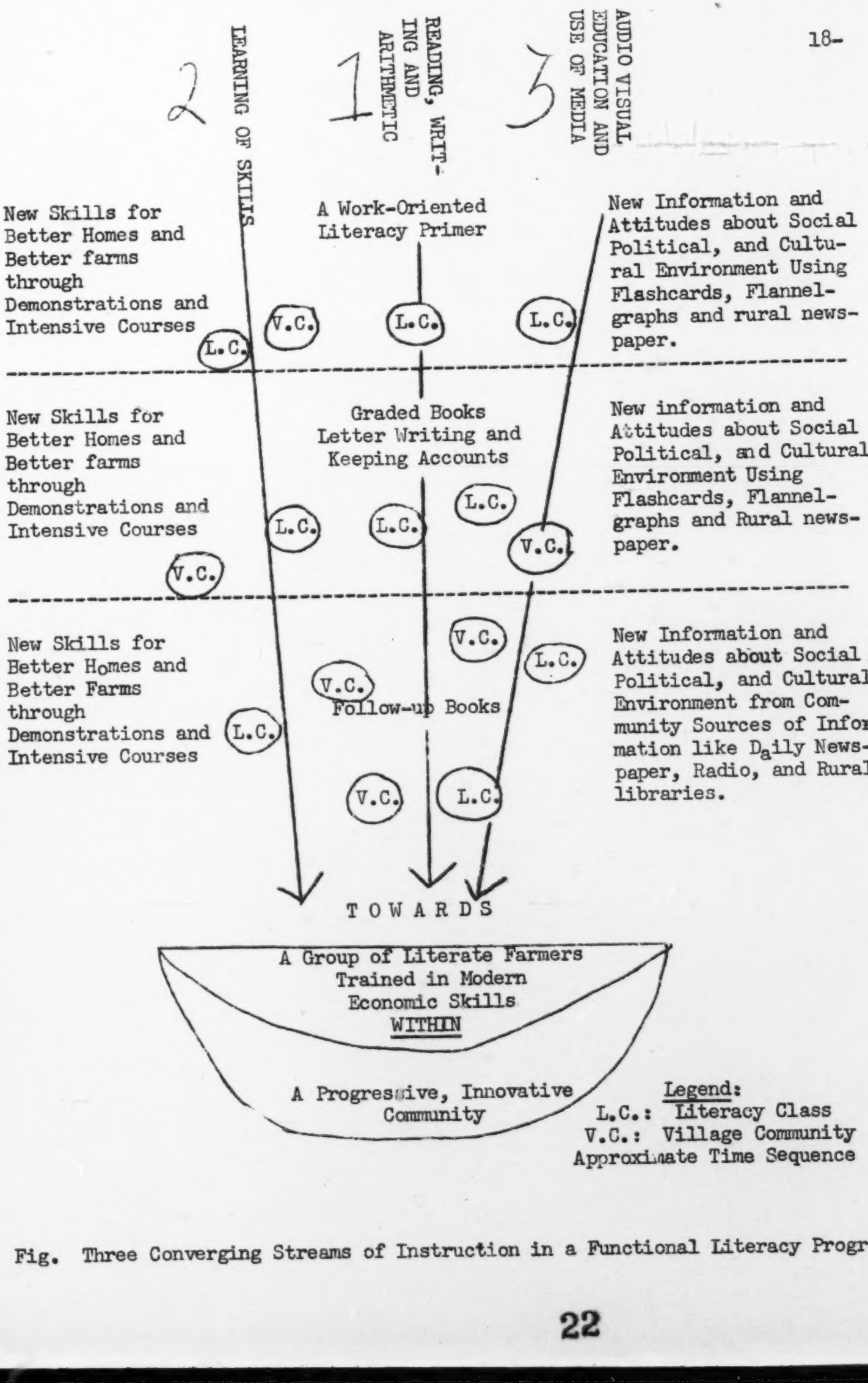
2
LEARNING OF SKILLS
1
READING, WRITING AND ARITHMETIC
3
AUDIO VISUAL EDUCATION AND USE OF MEDIA
New Skills for Better Homes and Better farms through Demonstrations and Intensive Courses
L.C.
V.C.
A Work-Oriented Literacy Primer
L.C.
L.C.
New Information and Attitudes about Social Political, and Cultural Environment Using Flashcards, Flannelgraphs and rural newspaper.
New Skills for Better Homes and Better farms through Demonstrations and Intensive Courses
V.C.
L.C.
Graded Books Letter Writing and Keeping Accounts
L.C.
L.C.
V.C.
New information and Attitudes about Social Political, and Cultural Environment Using Flashcards, Flannelgraphs and Rural newspaper.
New Skills for Better Homes and Better Farms through Demonstrations and Intensive Courses
L.C.
V.C.
Follow-up Books
V.C.
L.C.
V.C.
L.C.
New Information and Attitudes about Social Political, and Cultural Environment from Community Sources of Information like Daily Newspaper, Radio, and Rural libraries.
TOWARDS
A Group of Literate Farmers Trained in Modern Economic Skills WITHIN
A Progressive, Innovative Community
Legend:
L.C.: Literacy Class
V.C.: Village Community
Approximate Time Sequence

Fig. Three Converging Streams of Instruction in a Functional Literacy Programme

sector might be viewed. This figure should also point up the fact that the integration of content and of teaching activities has to be achieved at various levels. The work with adults in literacy classes and work in the communities outside classes has to be related so that we do not only have some isolated individuals practicing new skills but also a community that is ready to adopt innovations. The three streams of instruction must be integrated in terms of time and through comprehensive day-to-day programme plans. One must not regress to teaching of reading and writing alone with only verbal knowledge of the economic activity included in the primer. Functional skills must be taught on the farm or in the factory. And last but not least, audio-visual aids and media must be used consistently and imaginatively.

The functional literacy programme, again, demands the use of a vaiety of instructional materials, both for learners and for teachers. These include not only reading materials but also audio-visual materials and demonstration kits and workshops. In the following table are included most of the materials that will need to be available for an effective functional literacy programme.

Functional literacy cannot be taught with reading materials alone. Messages have to be dramatized for attitudinal changes. And this is best done with visuals and even better with folk media. Some other messages cannot wait until the adults have learnt to read. Those must be visualised for them through the use of audio-visual materials. There must be tools, implements, machines, workshops. A kit of diversified instructional materials is as natural to a functional literacy worker as his two legs to an ace runner. Certainly not by word alone!

Training Needs of Functional Literacy

As has been indicated earlier, functional literacy requires profes-

TABLE

Functional Literacy Materials Needs

	For Learners	For Teachers
WRITTEN MATERIALS	Primer Exercise Book for Writing Arithmetic and Simple Accounting Book A Book of Letters of Everyday Life Graded Books (In Series with the Primer) Follow-up Books for Independent Reading Special Newspaper (With Readability Control)	Teacher's Guide Teacher's Guide In-service Training Materials (Correspondence Courses or Newsletters)
AUDIO-VISUAL	Posters and Charts Drillcards for Language Teaching Flashcard Stories	Teacher's Guide Sheets
	<u>Community Resources</u>: Folk Media Films Radio Press	Discussion sheets for Use in Discussion Forums
SKILL DEMONSTRATION KITS, AND PACKAGED COURSES	Demonstration Kits with Tools and Implements Packaged Technical Courses	Teacher's Guide Sheets Teacher's Guide Books

sionalism of high standards. Commonsense is not enough. The most important training need is often at the highest level of programme organization and administration. As in other areas the first educational need is the education of leadership. This is difficult not because resources are not available but because the would-be trainees do not see the need and are unwilling to enter formally into learner roles.

It is indeed not possible to exhaust training needs of functional literacy projects or to suggest strategies for fulfilling such training needs. Two points, however, may be usefully made. First, that training is not the panacea that solves all problems. Sometimes organizers may mistake a problem to be a training problem when it actually requires administrative solutions. Training is preparation for work but to get the work really done by trained people their roles must be defined and institutionalized. Second, training curriculum should be related directly to the job analysis of positions or roles for which training programmes are being designed. I have discussed this problem more fully elsewhere.[11]

Evaluating Results

Evaluation is an important part of any functional literacy programme. For an experimental project that would have to prove or disprove something when it concludes evaluation is an obvious need. However, evaluation at its best, does not only deliver a judgment when it is all over but provides continuous feedback. It is diagnostic. It is a radar screen on which implementers of programme should see the successful piloting of the programmes or their impending disintegration and be able to do something about them. Evaluation, therefore, must be built-into the programme itself and fed continuously

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[11] H. S. Bhola, "Some Guidelines for Planning Training Courses," Indian Journal of Adult Education, vol XXX, No. 9. September 1969, Pages 5-9.

into programme planning and programme adjustments at every step.[12]

Functional literacy work is social engineering. It must have both qualitative and quantitative data available to test performance, to record progress, to measure results. Formalized evaluation procedures must be used. General impressions and stray evaluative judgments even of experts won't do. Again, evaluation must be concerned with both individuals and social units. It must record at least two types of data—educational data (because it is a literacy project) and socio-economic change data (because it is a change project).

Conclusions

As has been said in the beginning of the paper it is important that the concept of functional literacy gets a fair trial. It must be tested professionally by professional workers and failures and successes must be assigned to various factors— conceptual, administrative, financial, and of expertise. If a project starved of staff and resources fails it would not be the concept that would have failed. If a project failed for lack of coordination and subsequent in-fighting it would be unfair to discredit the concept. The theory seems to be sound: Man is a symbol-using animal and is unique for that quality. The more efficiently he uses those symbols more freedoms he acquires and the more efficiently he operates on his environment. An illiterate farmer could perhaps be a progressive farmer but literacy would make a difference. It will make his being progressive more possible, more

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[12] See Dan Stufflebeam, "Evaluation as Enlightenment for Decision-making" an address delivered at the working conference on assessment theory sponsored by the ASCD Commission on Assessment of Educational Outcomes, Sarasota, Fla. January, 1968. (Paper available from the Ohio State University Evaluation Centre, Columbus, Ohio).

quick, and more generative. To use an American TV commercial, in literacy he would get "a gift that would keep on giving."[13]

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[13] This paper is adapted from the author's monograph of the same title, now in manuscript, and will be ready for publication early next year.

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